

STATE OF HAWAII  
DEPARTMENT OF DEFENSE

TESTIMONY ON SENATE BILL 661 SD2  
A BILL RELATING TO UNMANNED AERIAL SYSTEMS TEST SITES

PRESENTATION TO  
THE HOUSE COMMITTEE ON FINANCE

BY  
BRIGADIER GENERAL ARTHUR J. LOGAN  
ADJUTANT GENERAL  
AND DIRECTOR OF THE HAWAII EMERGENCY MANAGEMENT AGENCY  
April 9, 2015

Chair Luke, Vice Chair Nishimoto, and Members of the House Committee on Finance:

I am Brigadier General Arthur J. Logan, State Adjutant General and the Director of the Hawaii Emergency Management Agency. I am testifying in **support** of Senate Bill 661 SD2.

The Federal Aviation Administration (FAA) selected the Pan Pacific Unmanned Aerial Systems (UAS) Test Range Complex (which involves Alaska, Oregon, and Hawaii) as one of the six national test sites. These six sites will safely integrate UAS into the National Airspace System administered by the FAA. Testing UAS at these sites, in restricted, non-public airspace, will lead to the development of federal regulations that will help ensure safety during UAS operations and provide for public privacy.

UAS technologies already in use include: wildlife counts, fisheries management, disaster management, and cinematography. UAS has great potential in any application where an aerial task needs completing. In these tasks, UAS offers several advantages over manned flight:

- Lower-costs
- Reduced safety risks and increased capability related to manned operations
- Reduced impacts on the environment

There are positive economic impacts to Hawaii as a result of test range users as well as creation of new jobs to support commercial industry testing and services.

The establishment and appropriation of funding for Hawaii's Chief Operating Officer and Advisory Board is critical in both establishing Hawaii's test ranges and tracking both state and national efforts to address UAS safety and privacy concerns, including the development of federal regulations pertaining to such issues.

Thank you for allowing me to testify in **support** of Senate Bill 661 SD2.



## DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM

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Statement of  
**LUIS P. SALAVERIA**  
**Director**  
Department of Business, Economic Development & Tourism

before the  
**HOUSE COMMITTEE ON FINANCE**

Thursday, April 09, 2015  
2:00 p.m.  
State Capitol, Conference Room 308

in consideration of  
**SB 661, SD 2**  
**RELATING TO UNMANNED AERIAL SYSTEMS TEST SITES.**

Chair Luke, Vice Chair Nishimoto, and Members of the Committee.

The department supports the intent of this bill to establish the Hawaii unmanned aerial systems test site chief operating officer position to serve on the Pan-Pacific Unmanned Aerial Systems Test Range Complex (PPUTRC) management team, as well as an advisory board to oversee unmanned aerial systems test site operations.

With respect to the Chief Operating Officer referenced on page 6, line 9, of this bill, and the administrative assistant referenced on page 8, line 5, we recommend that these individuals be hired as contractors to the department, which would both expedite the hiring process and provide maximum flexibility in implementing their professional assignments.

We support this measure, provided that its passage does not replace or adversely impact priorities indicated in the Executive Budget.

Thank you for the opportunity to testify on this bill.

April 9, 2015

Aloha Members of the House Finance Committee:

The State of Hawaii solicited and was selected to be a national test range site by the Federal Aviation Administration (FAA) for Unmanned Aerial System testing. As part of a team which includes Alaska and Oregon, Hawaii will play a vital role in protecting the safety of the flying public at home and in the National Airspace. (NAS).

This UAS subject is not new. Rapid UAS advancement as seen in the recent press, is forcing state and federal policy makers into discussions on how to deal with the disruptive technology. The benefits of UAS may seem pretty obvious but there are many issues such as safety and privacy that will need to be solved. Even though the task of regulating safety falls to the FAA, many stakeholders will need to be involved in the discussion. DOD, ATC, TSA, US Customs, Coast Guard, State Ports, General/Commercial Aviation Police and Academia will all need to play a role.

Hawaii is fairly unique in the fact that all of the stakeholders are represented here and are in close proximity to one another. We also are unique in the fact that most of the testing can be done in oceanic areas and away from population centers.

Hawaii's selection brings with it certain responsibilities and financial commitments that we as a State must step up to if we are to contribute effectively to participate in this critical national safety agenda. SB 661 sets out the roles, responsibilities and financial requirements for setting up an infrastructure to accomplish the task of creating a test range.

The FAA awarded the UAS test range to the State, which gives us an opportunity to engage upfront as part of the UAS solution instead of letting other states or the Federal government force the rules on us.

As a citizen of Hawaii and Vice Chair of the Hawaii Aerospace Advisory Committee (HAAC) I support this upcoming opportunity for our state and humbly request your support in the furtherance of SB661.

Respectfully submitted,

Mark Spence  
425 South Street #3904  
Honolulu, HI 96813

April 9, 2015

Members of the 28th Hawaii State Legislature:

I, Reid Noguchi, would like to submit testimony in favor of SB 661 RELATING TO UNMANNED AERIAL SYSTEMS TEST SITES.

As a leader in the aerospace industry in Hawaii, I strongly support this bill to fund and staff a team that is dedicated to assuring that the State positions itself as one of the Nation's most viable and opportune locations for unmanned aerial system (UAS) testing. Although having succeed in being designated one of six FAA-approved UAS test sites in the country, there is still a significant effort ahead to capitalize on this unique and long-term opportunity. Each of the six FAA test sites are now in competition amongst each other to capitalize on their designation by being the first to start UAS operations, by offering discriminating and compelling reasons to use their sites, and to jump start the establishment of a thriving and self-sustaining industry that will create a wide spectrum of jobs and educational opportunities. For our State to get ahead of the competition and not lose this opportunity, it is imperative that we quickly establish a staff with sufficient authority and funding to make this happen.

There are many contributions to the significant economic benefits to establish the State as a national resource for UAS testing. Being a part of the defense/aerospace industry in Hawaii, I can speak to the challenges that face us with shrinking DoD budgets. With less funding available, there is more competition, and with that an inherent need to identify, establish, and leverage geographic discriminators to improve the chances of being awarded federally funded work in Hawaii. With the established military ranges, like the Pacific Missile Range Facility and Pohakuloa, and the strong support of our military leadership we have a compelling case that initial UAS testing can be done quickly with existing resources. However, the charter of the FAA test sites includes addressing standards and policies extending to operational testing in civil airspace. In this context, there is significant work that must be done to make it simple and cost effective for the existing and emerging UAS industries to select Hawaii as their testing location of choice. If not, they will take their capabilities to other States, who will then start growing and improving their infrastructure, further reducing their operating costs, and giving them an even stronger edge in supporting future UAS business. Hawaii can be in that position if we establish and support a team to bring that to reality.

From the industry perspective, the potential impact to the economy and workforce in Hawaii is significant.

Jobs directly created with a UAS testing site include:

- Test range management and administration
- Test range marketing, community outreach, and STEM education
- Test range maintenance and inspection
- Range safety personnel
- Unmanned aerial vehicle (UAV) maintenance
- UAV safety inspections
- UAV control station maintenance (including Information Technology services)
- Payload calibration and repair
- UAS usage auditing for law enforcement

Derivative jobs that would be created once UAS testing starts to establish itself as a viable UAS industry include:

- UAV maintenance and repair training
- Data processing and analysis services
- UAS data collection services
- UAS parcel delivery services
- UAS private security services
- UAS services for Department of Transportation, Department of Land and Natural Resources, Public Utilities, Police Department, Fire Department
- UAS aerial photography/filmography services
- Small UAV manufacturing
- Sensor/payload development and manufacturing
- Sensor/payload software development
- Research and development (air vehicles, ground control stations, communications data links, sensors/payloads, processing software, multi-vehicle cooperation, etc.)

In addition to the immediate economic benefits directly related to operating a UAS test site and the derivative industry that will build upon constant usage of that site, there will also be a longer-term and broader positive impact in the community. Creation of a significant number of high technology jobs in the State could also lead to the establishment of new college degree programs in Hawaii for UAS-related fields. This would then serve to provide a pipeline for future generations of our workforce and alleviate the current-day challenges to find qualified technologists that are willing to move to Hawaii and have longevity in the State.

There are a wide diversity of benefits to the State of Hawaii to establish itself as a prime national competitor for UAS testing, of which only a few are mentioned here. These, by themselves, are compelling reasons why the State should invest in making sure that we capitalize on our designation as an FAA test site. However, there are just as compelling

reasons why it would be looked unfavorably by our partners (Alaska and Oregon), by the nation and the FAA, and even the people of Hawaii if we do not pass this bill.

If we did not invest in a qualified and dedicated team to establish ourselves as a UAS test site, our tri-State partners, Alaska and Oregon, may be discouraged by Hawaii's lack of commitment and support. This might lead them to restructure their operational framework to rely less on Hawaii to mitigate the risk of not having sufficient resources when they're needed. This could result in a reduced level of activity in Hawaii.

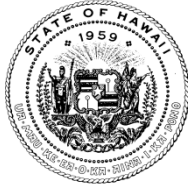
Similarly, the States who were not selected by the FAA, as well as the FAA themselves, would question our State's commitment to the national UAS strategy and why we proposed being a key part of it. While this may not have a direct impact on the level of UAS activity in Hawaii, it may make the necessary coordination between Hawaii and the FAA more difficult and prolong regulatory approvals and agreements.

Lastly, one key aspect about UAS testing in Hawaii is regarding public privacy and safety. While these issues will undoubtedly be addressed over the duration of this program, it will be imperative to remain responsive to the communities opinions and concerns, and to do so in a concerted and timely manner. This can only be effectively done with resources that are dedicated to the task and not spread thin with other responsibilities. A lack of responsiveness here may cause unrest in the community and lead to unnecessary setbacks or obstacles in the State's effort to be first and strongest amongst the six test ranges.

In summary, this opportunity provided to us by the FAA to be one of six designated UAS test ranges is one that has significant near-term and long-term benefits to the State, its workforce, and its community. These benefits, however, are only a potential unless we proactively compete against and distinguish ourselves from the other five sites, we mirror the commitment of our tri-State partners, and are responsive and forthcoming to the people of Hawaii along the way. To be successful in this unique opportunity, I strongly support this bill.

Reid Noguchi  
Hawaii Aerospace Advisory Committee

DAVID IGE  
GOVERNOR



Testimony of  
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IN REPLY REFER TO:

**STATE OF HAWAII**  
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April 9, 2015  
2:00 p.m.  
State Capitol, Room 308

**S.B. 661, S.D. 2**  
**RELATING TO UNMANNED AERIAL SYSTEMS TEST SITES**

House Committee on Finance

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The Department of Transportation **supports** this bill, which provides funding for a Chief Operating Officer, staff, and provisions for an advisory board for the Hawaii segment of the Pan Pacific UAS Test Range Complex (PPUTRC), under the auspices of the Department of Business, Economic Development, and Tourism.

Thank you for the opportunity to submit this testimony.